

FIG. 1

2/23

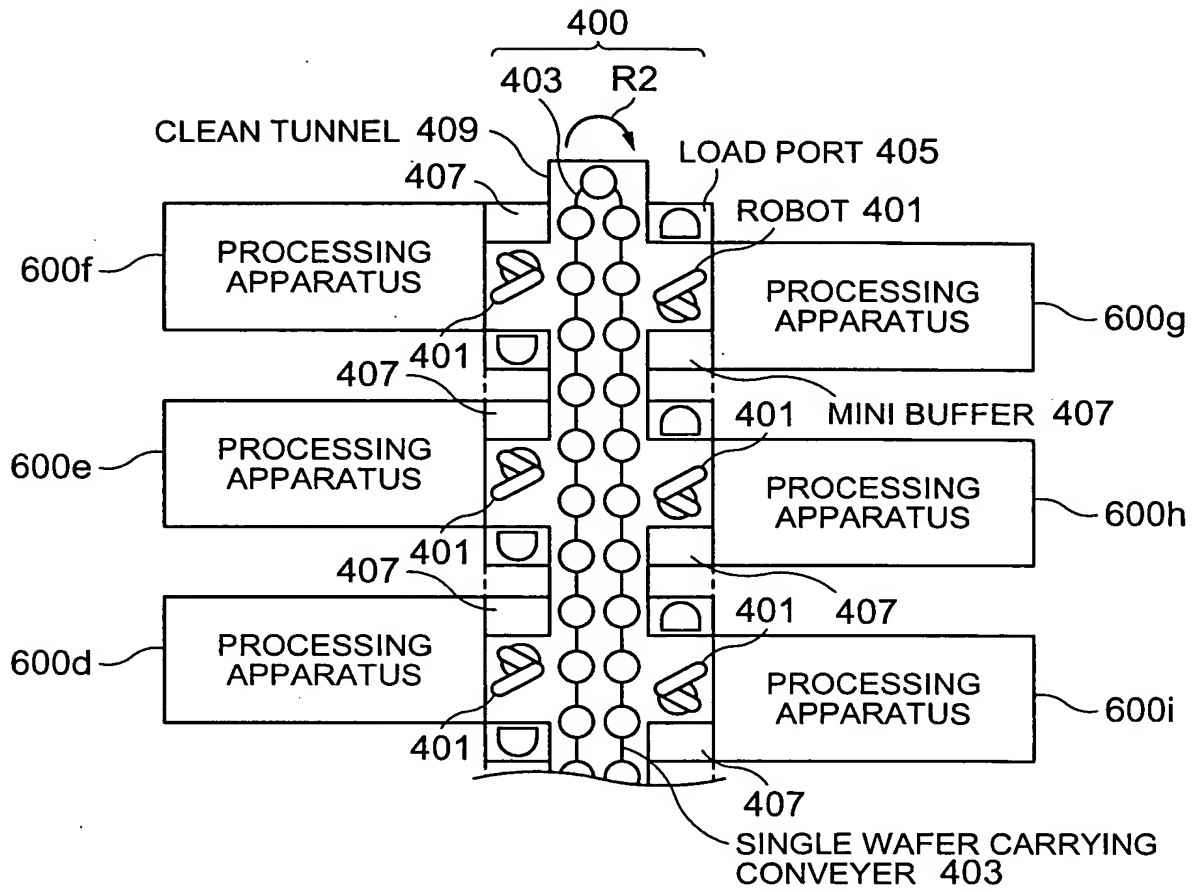


FIG. 2A

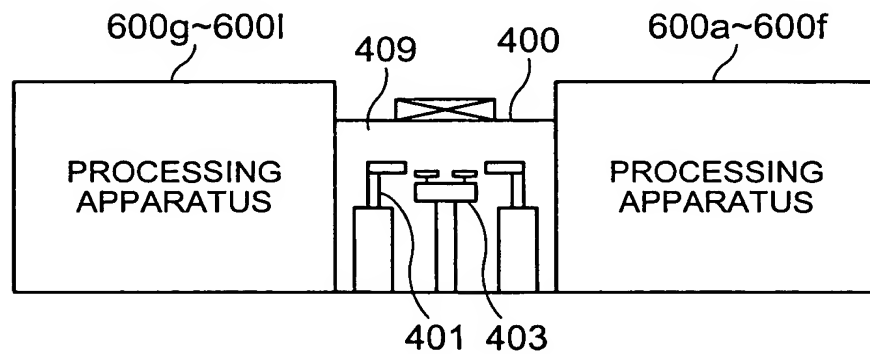


FIG. 2B

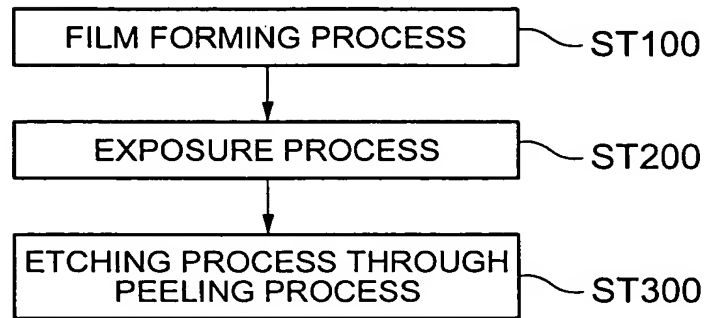


FIG. 3

WetET-A	1
DryET-A	1
DryET-B	2
DryET-C	1
Ash	2
CLEANING	1
APPEARANCE INSPECTION	2
MEASUREMENT OF DIMENSION	1
MEASUREMENT OF FILM THICKNESS	1

FIG. 4

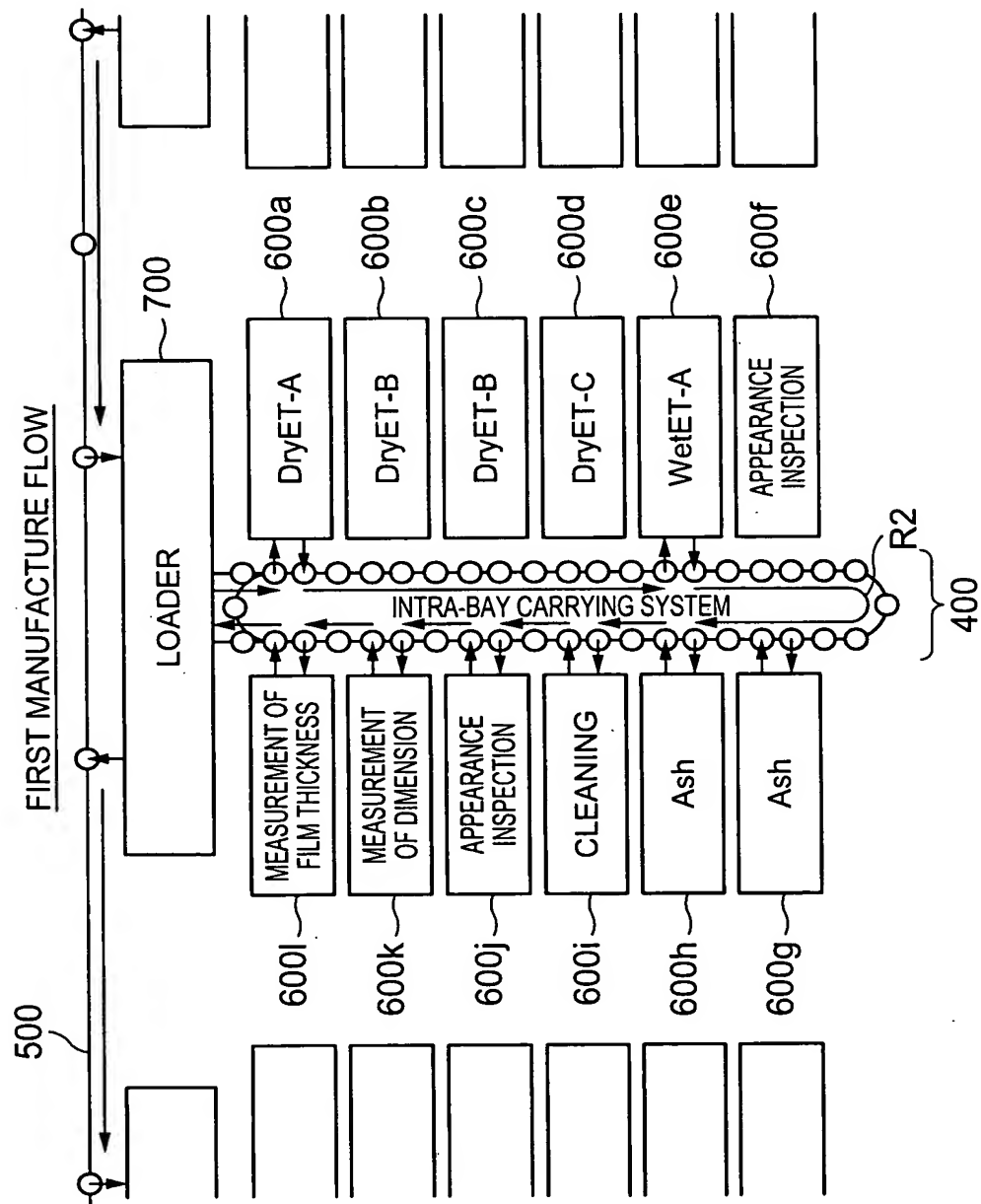


FIG. 5

5/23

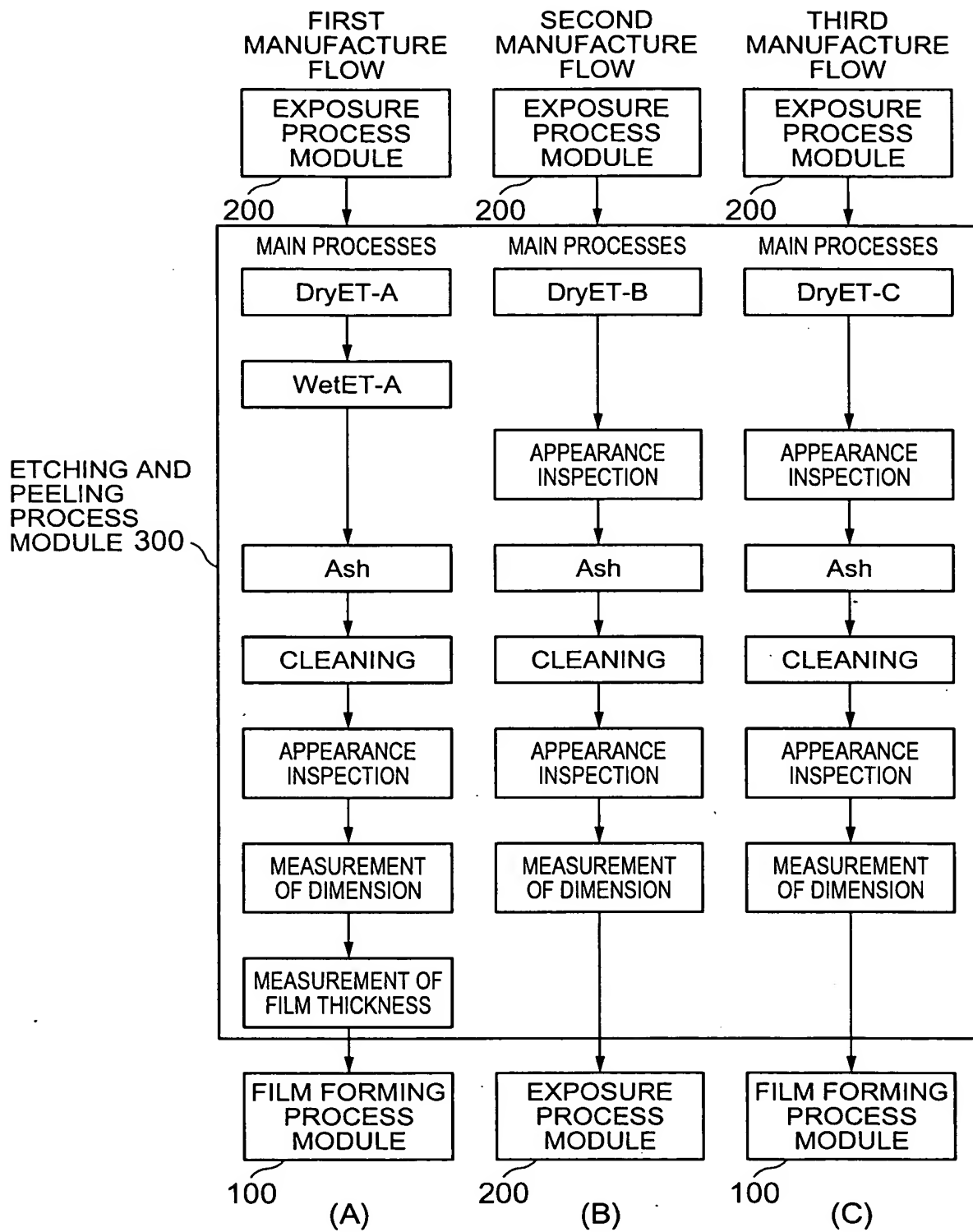


FIG. 6

FIG. 7

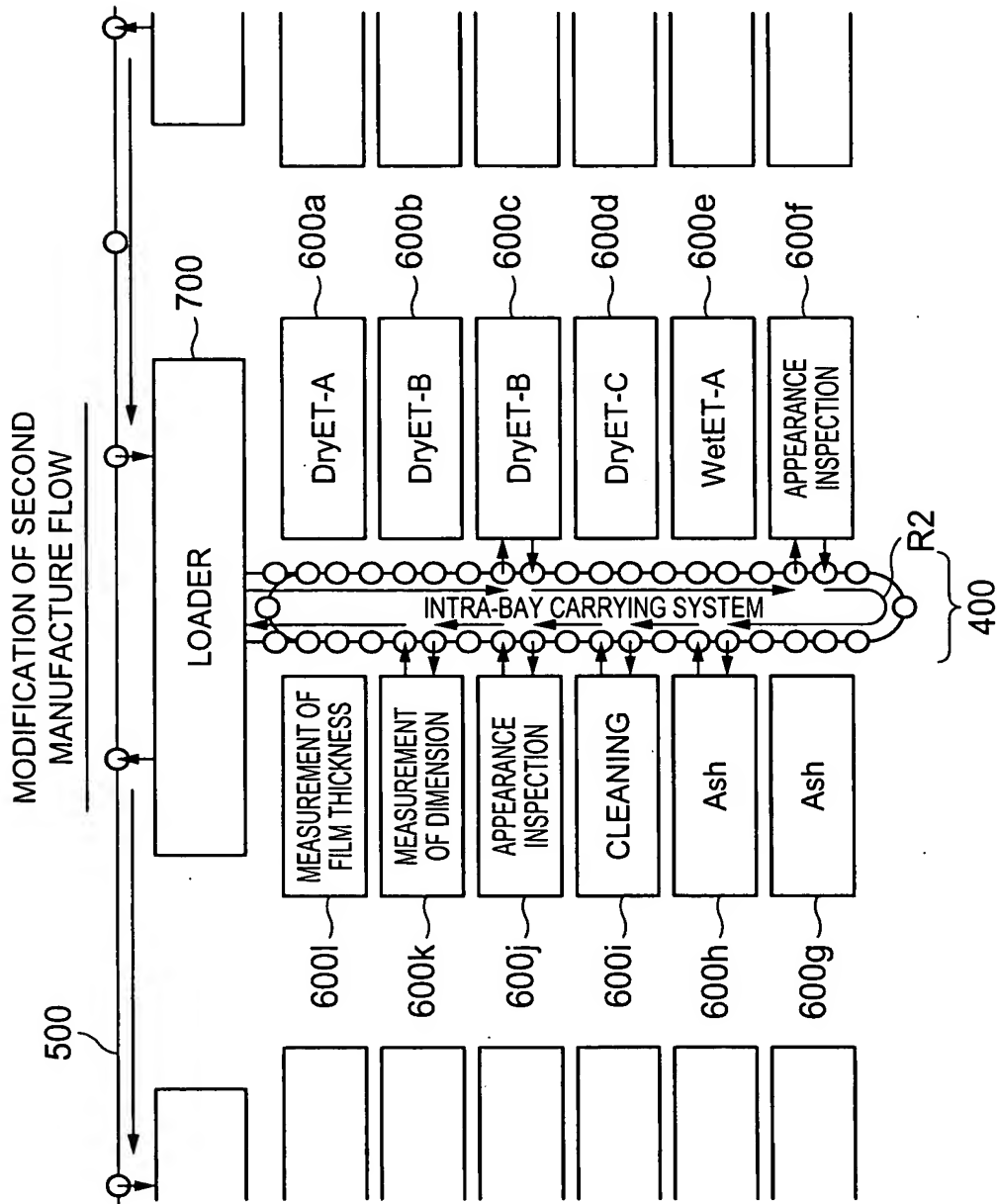


FIG. 8

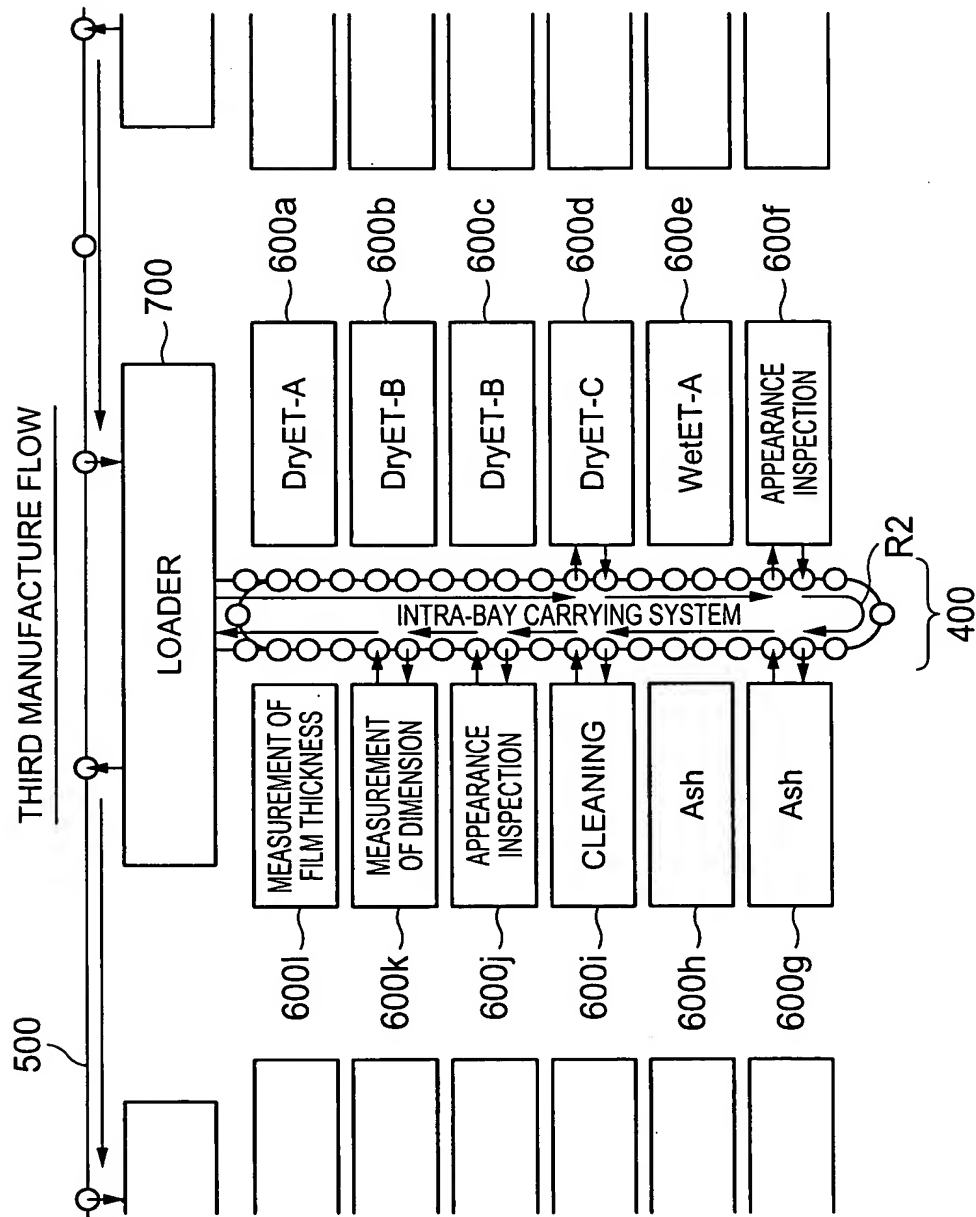
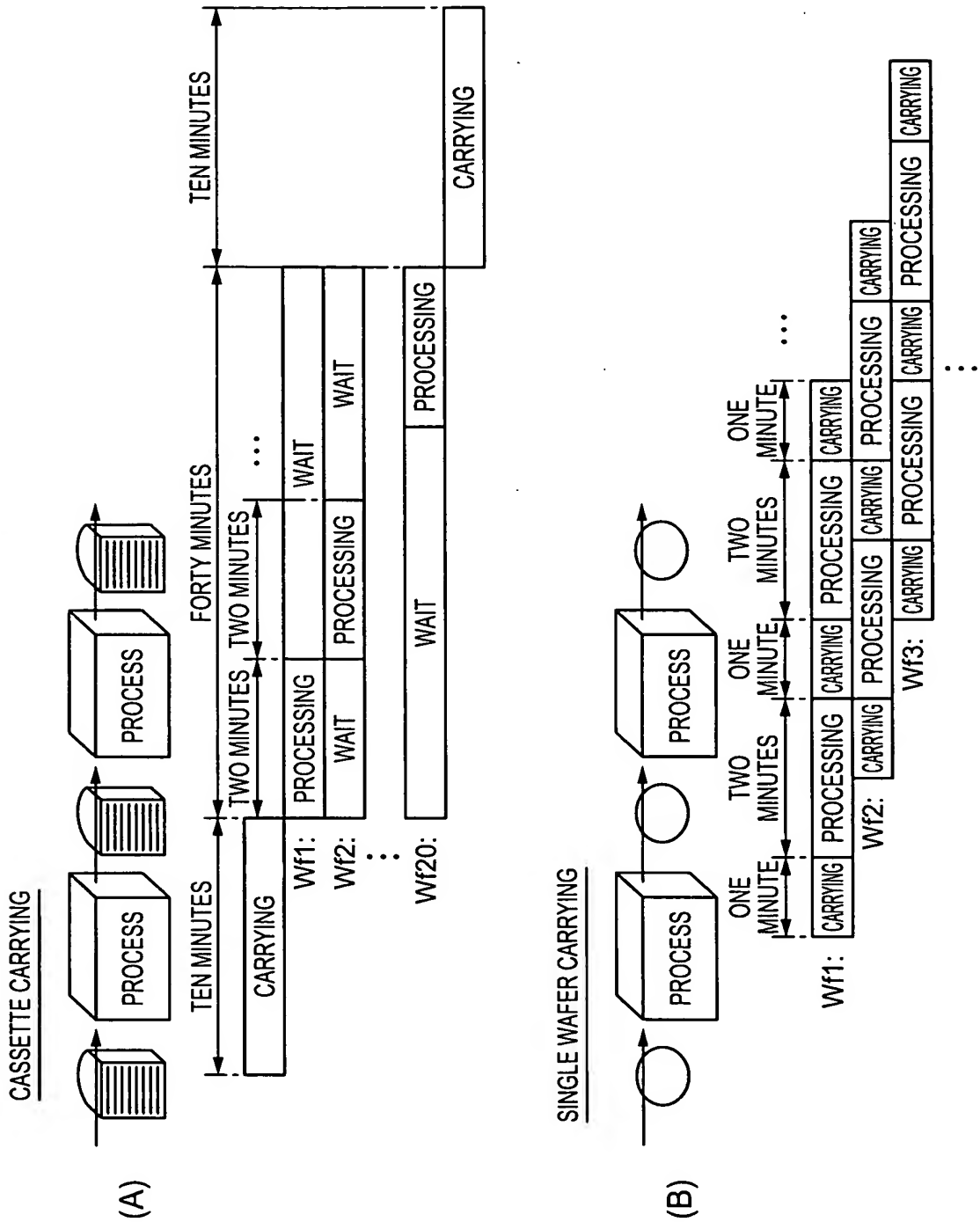


FIG. 9



10/23

LAYER	CLEANING PROCESS	FILM FORMING PROCESS	INSPECTION PROCESS	CLEANING PROCESS	ANNEALING PROCESS	CLEANING PROCESS	PHOTOLITHOGRAPHY PROCESS	INSPECTION PROCESS	INSPECTION PROCESS	ION IMPLANTATION PROCESS	ETCHING PROCESS	ETCHING PROCESS	ASHING PROCESS	PEELING PROCESS	INSPECTION PROCESS
1	CLEANING A	SPUTTERING A		CLEANING B			PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING A		ASHING A	PEELING A	INSPECTION B
2		CVD-A	INSPECTION A	CLEANING B	ANNEALING A	CLEANING C									
3		CVD-B		CLEANING B	ANNEALING B	CLEANING C	PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING B		ASHING A	PEELING A	INSPECTION B
4	CLEANING A	THERMAL OXIDATION A	INSPECTION A												
5		CVD-C			ANNEALING C		PHOTOLITHOGRAPHY A		INSPECTION C	ION IMPLANTATION A			ASHING A	PEELING A	
6							PHOTOLITHOGRAPHY A		INSPECTION C	ION IMPLANTATION A			ASHING A		
7	CLEANING A	CVD-D			ANNEALING D	CLEANING A	PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING B		ASHING A	PEELING A	INSPECTION B
8							PHOTOLITHOGRAPHY A		INSPECTION C	ION IMPLANTATION A			ASHING A	PEELING A	
9							PHOTOLITHOGRAPHY A		INSPECTION C	ION IMPLANTATION A			ASHING A	PEELING A	
10							PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C	ION IMPLANTATION A			ASHING A	PEELING A	
11	CLEANING A	CVD-A	INSPECTION A				PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING C	WET ETCHING A	ASHING A	PEELING A	INSPECTION B
12	CLEANING A	CVD-D			ANNEALING D	CLEANING A	PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING B		ASHING A	PEELING A	INSPECTION B
13	CLEANING A	CVD-C					PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING C		ASHING A	PEELING A	INSPECTION B
14		CVD-D			ANNEALING D	CLEANING A									
15		SPUTTERING A		CLEANING B			PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING A		ASHING A	PEELING A	INSPECTION B
16	CLEANING A	CVD-E			ANNEALING A		PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING C	WET ETCHING A	ASHING A	PEELING A	INSPECTION B
17							PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING C	WET ETCHING A	ASHING A	PEELING A	INSPECTION B
18		SPUTTERING B					PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING D			PEELING B	INSPECTION B
19		CVD-E		CLEANING B	ANNEALING E	CLEANING A	PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING C	WET ETCHING A	ASHING A	PEELING A	INSPECTION B
20		SPUTTERING C		CLEANING B			PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING E		ASHING A	PEELING B	INSPECTION B
21							PHOTOLITHOGRAPHY A		INSPECTION C		WET ETCHING A		ASHING A	PEELING B	INSPECTION B

FIG. 11

PROCESS NO.	LAYER	APPARATUS	PROCESS NO.	LAYER	APPARATUS	PROCESS NO.	LAYER	APPARATUS
1	1	CLEANING A	55	8	ASHING A	109	15	PEELING A
2	1	SPUTTERING A	56	8	PEELING A	110	15	INSPECTION B
3	1	CLEANING B	57	9	PHOTOLITHOGRAPHY A	111	16	CLEANING A
4	1	PHOTOLITHOGRAPHY A	58	9	INSPECTION C	112	16	CVD-E
5	1	INSPECTION B	59	9	ION IMPLANTATION A	113	16	ANNEALING A
6	1	INSPECTION C	60	9	ASHING A	114	16	PHOTOLITHOGRAPHY A
7	1	DRY ETCHING A	61	9	PEELING A	115	16	INSPECTION B
8	1	ASHING A	62	10	PHOTOLITHOGRAPHY A	116	16	INSPECTION C
9	1	PEELING A	63	10	INSPECTION B	117	16	DRY ETCHING C
10	1	INSPECTION B	64	10	INSPECTION C	118	16	WET ETCHING A
11	2	CVD-A	65	10	ION IMPLANTATION A	119	16	ASHING A
12	2	INSPECTION A	66	10	ASHING A	120	16	PEELING A
13	2	CLEANING B	67	10	PEELING A	121	16	INSPECTION B
14	2	ANNEALING A	68	11	CLEANING A	122	17	PHOTOLITHOGRAPHY A
15	2	CLEANING C	69	11	CVD-A	123	17	INSPECTION B
16	3	CVD-B	70	11	INSPECTION A	124	17	INSPECTION C
17	3	CLEANING B	71	11	PHOTOLITHOGRAPHY A	125	17	DRY ETCHING C
18	3	ANNEALING B	72	11	INSPECTION B	126	17	WET ETCHING A
19	3	CLEANING C	73	11	INSPECTION C	127	17	ASHING A
20	3	PHOTOLITHOGRAPHY A	74	11	DRY ETCHING C	128	17	PEELING A
21	3	INSPECTION B	75	11	WET ETCHING A	129	17	INSPECTION B
22	3	INSPECTION C	76	11	ASHING A	130	18	SPUTTERING B
23	3	DRY ETCHING B	77	11	PEELING A	131	18	PHOTOLITHOGRAPHY A
24	3	ASHING A	78	11	INSPECTION B	132	18	INSPECTION B
25	3	PEELING A	79	12	CLEANING A	133	18	INSPECTION C
26	3	INSPECTION B	80	12	CVD-D	134	18	DRY ETCHING D
27	4	CLEANING A	81	12	ANNEALING D	135	18	PEELING B
28	4	THERMAL OXIDATION A	82	12	CLEANING A	136	18	INSPECTION B
29	4	INSPECTION A	83	12	PHOTOLITHOGRAPHY A	137	19	CVD-E
30	5	CVD-C	84	12	INSPECTION B	138	19	CLEANING B
31	5	ANNEALING C	85	12	INSPECTION C	139	19	ANNEALING E
32	5	PHOTOLITHOGRAPHY A	86	12	DRY ETCHING B	140	19	CLEANING A
33	5	INSPECTION C	87	12	ASHING A	141	19	PHOTOLITHOGRAPHY A
34	5	ION IMPLANTATION A	88	12	PEELING A	142	19	INSPECTION B
35	5	ASHING A	89	12	INSPECTION B	143	19	INSPECTION C
36	5	PEELING A	90	13	CLEANING A	144	19	DRY ETCHING C
37	6	PHOTOLITHOGRAPHY A	91	13	CVD-C	145	19	WET ETCHING A
38	6	INSPECTION C	92	13	PHOTOLITHOGRAPHY A	146	19	ASHING A
39	6	ION IMPLANTATION A	93	13	INSPECTION B	147	19	PEELING A
40	6	ASHING A	94	13	INSPECTION C	148	19	INSPECTION B
41	7	CLEANING A	95	13	DRY ETCHING C	149	20	SPUTTERING C
42	7	CVD-D	96	13	ASHING A	150	20	CLEANING B
43	7	ANNEALING D	97	13	PEELING A	151	20	PHOTOLITHOGRAPHY A
44	7	CLEANING A	98	13	INSPECTION B	152	20	INSPECTION B
45	7	PHOTOLITHOGRAPHY A	99	14	CVD-D	153	20	INSPECTION C
46	7	INSPECTION B	100	14	ANNEALING D	154	20	DRY ETCHING E
47	7	INSPECTION C	101	14	CLEANING A	155	20	ASHING A
48	7	DRY ETCHING B	102	15	SPUTTERING A	156	20	PEELING B
49	7	ASHING A	103	15	CLEANING B	157	20	INSPECTION B
50	7	PEELING A	104	15	PHOTOLITHOGRAPHY A	158	21	PHOTOLITHOGRAPHY A
51	7	INSPECTION B	105	15	INSPECTION B	159	21	INSPECTION C
52	8	PHOTOLITHOGRAPHY A	106	15	INSPECTION C	160	21	WET ETCHING A
53	8	INSPECTION C	107	15	DRY ETCHING A	161	21	ASHING A
54	8	ION IMPLANTATION A	108	15	ASHING A	162	21	PEELING B
						163	21	INSPECTION B

FIG. 12

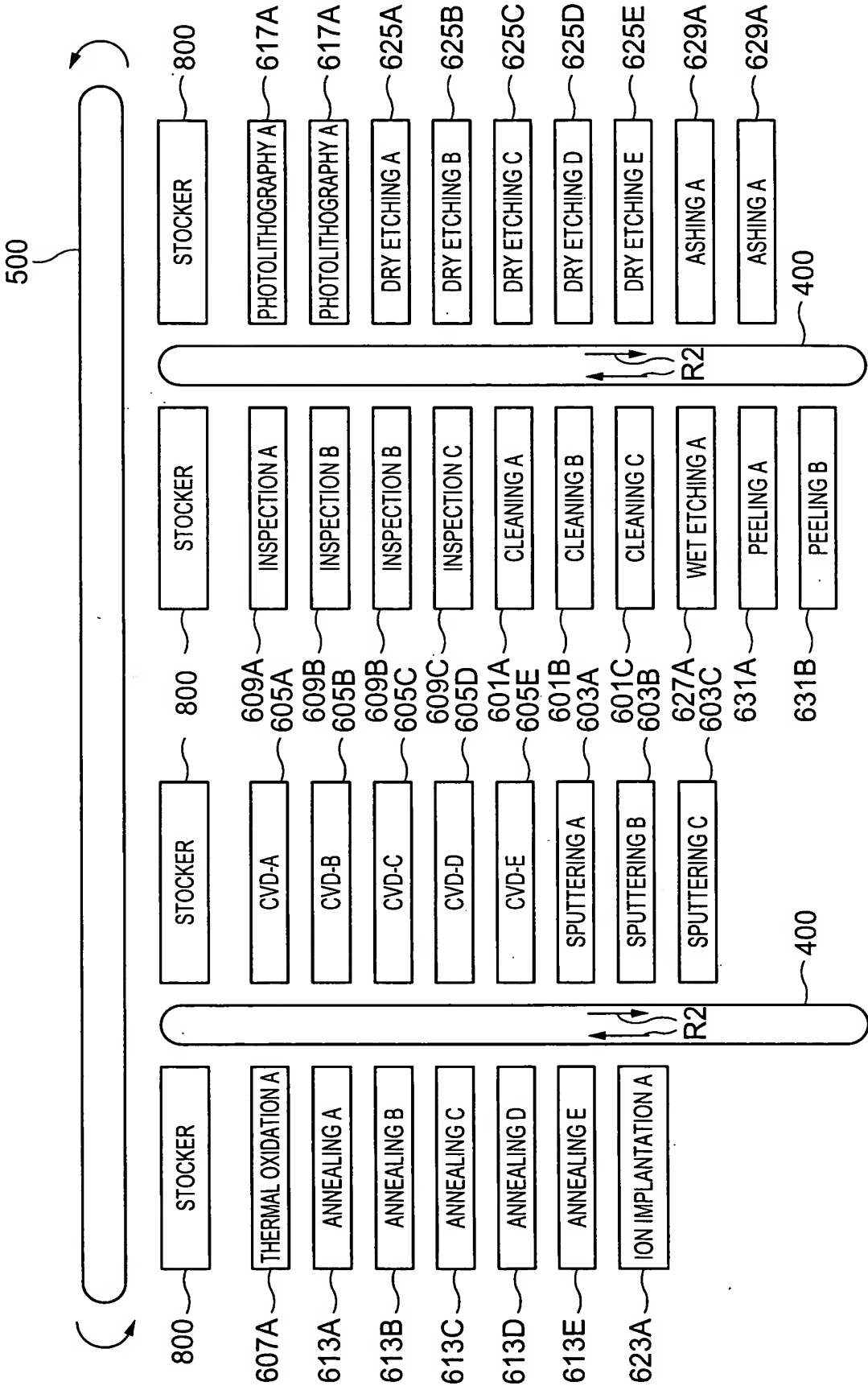
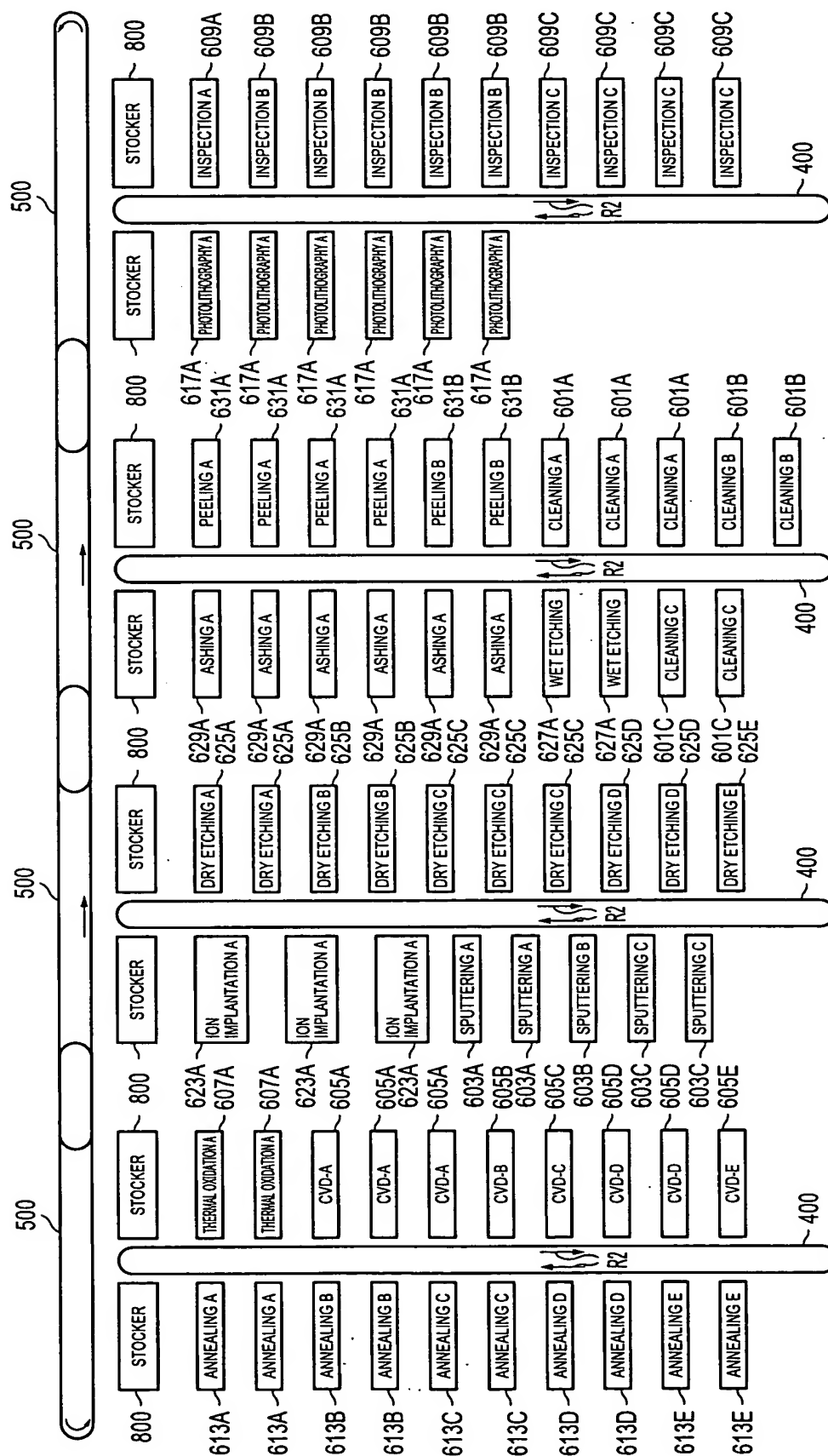


FIG. 13



14/23

APPARATUS	NUMBER OF APPARATUSES	
	2,500 SHEETS/MONTH	10,000 SHEETS/MONTH
CVD-A	1	3
CVD-B	1	1
CVD-C	1	1
CVD-D	1	2
CVD-E	1	1
ASHING A	2	6
ANNEALING A	1	2
ANNEALING B	1	2
ANNEALING C	1	2
ANNEALING D	1	2
ANNEALING E	1	3
ION IMPLANTATION A	1	3
WET ETCHING A	1	2
INSPECTION A	1	1
INSPECTION B	2	5
INSPECTION C	1	4
SPUTTERING A	1	2
SPUTTERING B	1	1
SPUTTERING C	1	2
CLEANING A	1	3
CLEANING B	1	2
CLEANING C	1	2
DRY ETCHING A	1	2
DRY ETCHING B	1	2
DRY ETCHING C	1	3
DRY ETCHING D	1	2
DRY ETCHING E	1	1
THERMAL OXIDATION A	1	2
PEELING A	1	4
PEELING B	1	2
PHOTOLITHOGRAPHY A	2	6
TOTAL	34	76

FIG. 15

FLOW-SHOP PROCESS CONSTRUCTION (2,500 SHEETS/MONTH)																				
LAYER	FIRST FLOW-SHOP FS1										SECOND FLOW-SHOP FS2									
	CLEANING PROCESS	FILM FORMING PROCESS	INSPECTION PROCESS	CLEANING PROCESS	ANNEALING PROCESS	CLEANING PROCESS	PHOTOLITHOGRAPHY PROCESS	INSPECTION PROCESS	INSPECTION PROCESS	ION IMPLANTATION PROCESS	ETCHING PROCESS	ETCHING PROCESS	ASHING PROCESS	PEELING PROCESS	INSPECTION PROCESS					
1	CLEANING A	SPUTTERING A		CLEANING B			PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING A		ASHING A	PEELING A	INSPECTION B					
2		CVD-A	INSPECTION A	CLEANING B	ANNEALING A	CLEANING C														
3		CVD-B		CLEANING B	ANNEALING B	CLEANING C	PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING B		ASHING A	PEELING A	INSPECTION B					
4	CLEANING A	THERMAL OXIDATION A	INSPECTION A																	
5		CVD-C			ANNEALING C		PHOTOLITHOGRAPHY A		INSPECTION C	ION IMPLANTATION A			ASHING A	PEELING A						
6							PHOTOLITHOGRAPHY A		INSPECTION C	ION IMPLANTATION A			ASHING A							
7	CLEANING A	CVD-D			ANNEALING D	CLEANING A	PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING B		ASHING A	PEELING A	INSPECTION B					
8							PHOTOLITHOGRAPHY A		INSPECTION C	ION IMPLANTATION A			ASHING A	PEELING A						
9							PHOTOLITHOGRAPHY A		INSPECTION C	ION IMPLANTATION A			ASHING A	PEELING A						
10							PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C	ION IMPLANTATION A			ASHING A	PEELING A						
11	CLEANING A	CVD-A	INSPECTION A				PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING C	WET ETCHING A	ASHING A	PEELING A	INSPECTION B					
12	CLEANING A	CVD-D			ANNEALING D	CLEANING A	PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING B		ASHING A	PEELING A	INSPECTION B					
13	CLEANING A	CVD-C					PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING C		ASHING A	PEELING A	INSPECTION B					
14		CVD-D			ANNEALING D	CLEANING A														
15		SPUTTERING A		CLEANING B			PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING A		ASHING A	PEELING A	INSPECTION B					
16	CLEANING A	CVD-E			ANNEALING A		PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING C	WET ETCHING A	ASHING A	PEELING A	INSPECTION B					
17							PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING C	WET ETCHING A	ASHING A	PEELING A	INSPECTION B					
18		SPUTTERING B					PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING D			PEELING B	INSPECTION B					
19		CVD-E		CLEANING B	ANNEALING E	CLEANING A	PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING C	WET ETCHING A	ASHING A	PEELING A	INSPECTION B					
20		SPUTTERING C		CLEANING B			PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING E		ASHING A	PEELING B	INSPECTION B					
21							PHOTOLITHOGRAPHY A		INSPECTION C		WET ETCHING A		ASHING A	PEELING B	INSPECTION B					

FIG. 16

16/23

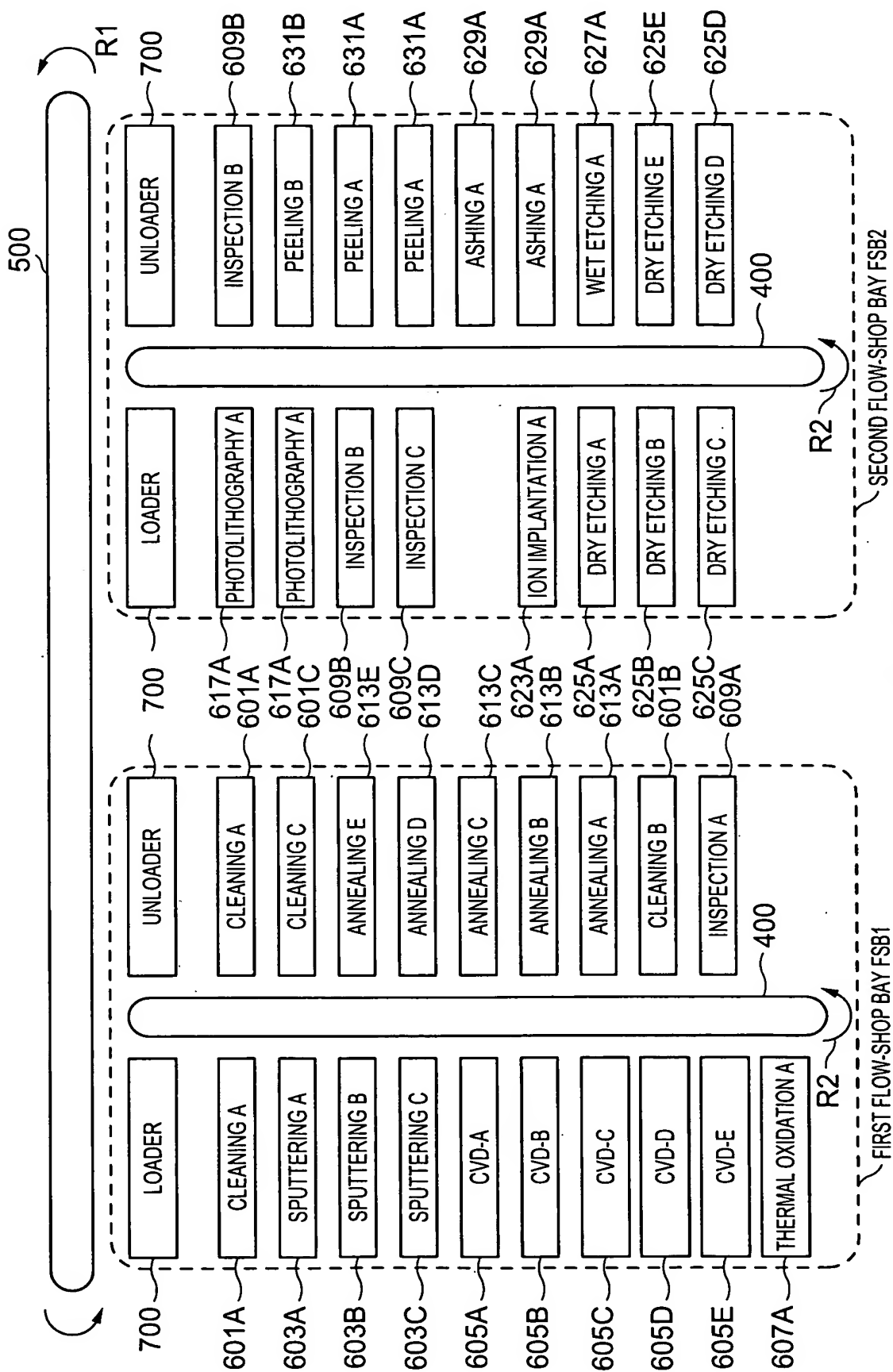


FIG. 17

17/23

FIRST FLOW-SHOP FS1

(A)

APPARATUS	NUMBER OF APPARATUSES
CVD-A	1
CVD-B	1
CVD-C	1
CVD-D	1
CVD-E	1
ANNEALING A	1
ANNEALING B	1
ANNEALING C	1
ANNEALING D	1
ANNEALING E	1
INSPECTION A	1
SPUTTERING A	1
SPUTTERING B	1
SPUTTERING C	1
CLEANING A	2
CLEANING B	1
CLEANING C	1
THERMAL OXIDATION A	1
TOTAL	19

SECOND FLOW-SHOP FS2

(B)

APPARATUS	NUMBER OF APPARATUSES
ASHING A	2
ION IMPLANTATION A	1
WET ETCHING A	1
INSPECTION B	2
INSPECTION C	1
DRY ETCHING A	1
DRY ETCHING B	1
DRY ETCHING C	1
DRY ETCHING D	1
DRY ETCHING E	1
PEELING A	1
PEELING B	1
PHOTOLITHOGRAPHY A	2
TOTAL	16

FIG. 18

FLOW-SHOP PROCESS CONSTRUCTION (10,000 SHEETS/MONTH)

LAYER	FIRST FLOW-SHOP FS1				SECOND FLOW-SHOP FS2				THIRD FLOW-SHOP FS3				FOURTH FLOW-SHOP FS4			
	CLEANING PROCESS A	FILM FORMING PROCESS SPUTTERING A	INSPECTION PROCESS A	INSPECTION PROCESS A	CLEANING PROCESS CLEANING B	ANNEALING PROCESS ANNEALING A	CLEANING PROCESS CLEANING B	CLEANING PROCESS CLEANING C	PHOTOLITHOGRAPHY PROCESS A	INSPECTION PROCESS B	INSPECTION PROCESS C	ION IMPLANTATION PROCESS A	ETCHING PROCESS DRY ETCHING A	ETCHING PROCESS ASHING A	PEELING PROCESS PEELING A	INSPECTION PROCESS INSPECTION B
1																
2		CVD-A		INSPECTION A	CLEANING B	ANNEALING A	CLEANING B	CLEANING C								
3		CVD-B			CLEANING B	ANNEALING B	CLEANING C		PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING B	ASHING A	PEELING A	INSPECTION B
4	CLEANING A	THERMAL OXIDATION A	INSPECTION A													
5		CVD-C				ANNEALING C			PHOTOLITHOGRAPHY A		INSPECTION C	ION IMPLANTATION A		ASHING A	PEELING A	
6									PHOTOLITHOGRAPHY A		INSPECTION C	ION IMPLANTATION A		ASHING A		
7	CLEANING A	CVD-D				ANNEALING D	CLEANING A		PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING B	ASHING A	PEELING A	INSPECTION B
8									PHOTOLITHOGRAPHY A		INSPECTION C	ION IMPLANTATION A		ASHING A	PEELING A	
9									PHOTOLITHOGRAPHY A		INSPECTION C	ION IMPLANTATION A		ASHING A	PEELING A	
10									PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C	ION IMPLANTATION A		ASHING A	PEELING A	
11	CLEANING A	CVD-A	INSPECTION A						PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING C	ASHING A	PEELING A	INSPECTION B
12	CLEANING A	CVD-D				ANNEALING D	CLEANING A		PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING B	ASHING A	PEELING A	INSPECTION B
13	CLEANING A	CVD-C							PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING C	ASHING A	PEELING A	INSPECTION B
14		CVD-D				ANNEALING D	CLEANING A									
15		SPUTTERING A			CLEANING B				PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING A	ASHING A	PEELING A	INSPECTION B
16	CLEANING A	CVD-E				ANNEALING A			PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING C	ASHING A	PEELING A	INSPECTION B
17									PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING C	ASHING A	PEELING A	INSPECTION B
18		SPUTTERING B							PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING D		PEELING B	INSPECTION B
19		CVD-E			CLEANING B	ANNEALING E	CLEANING A		PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING C	ASHING A	PEELING A	INSPECTION B
20		SPUTTERING C			CLEANING B				PHOTOLITHOGRAPHY A	INSPECTION B	INSPECTION C		DRY ETCHING E	ASHING A	PEELING B	INSPECTION B
21									PHOTOLITHOGRAPHY A		INSPECTION C		WET ETCHING A	ASHING A	PEELING B	INSPECTION B

FIG. 19

19/23

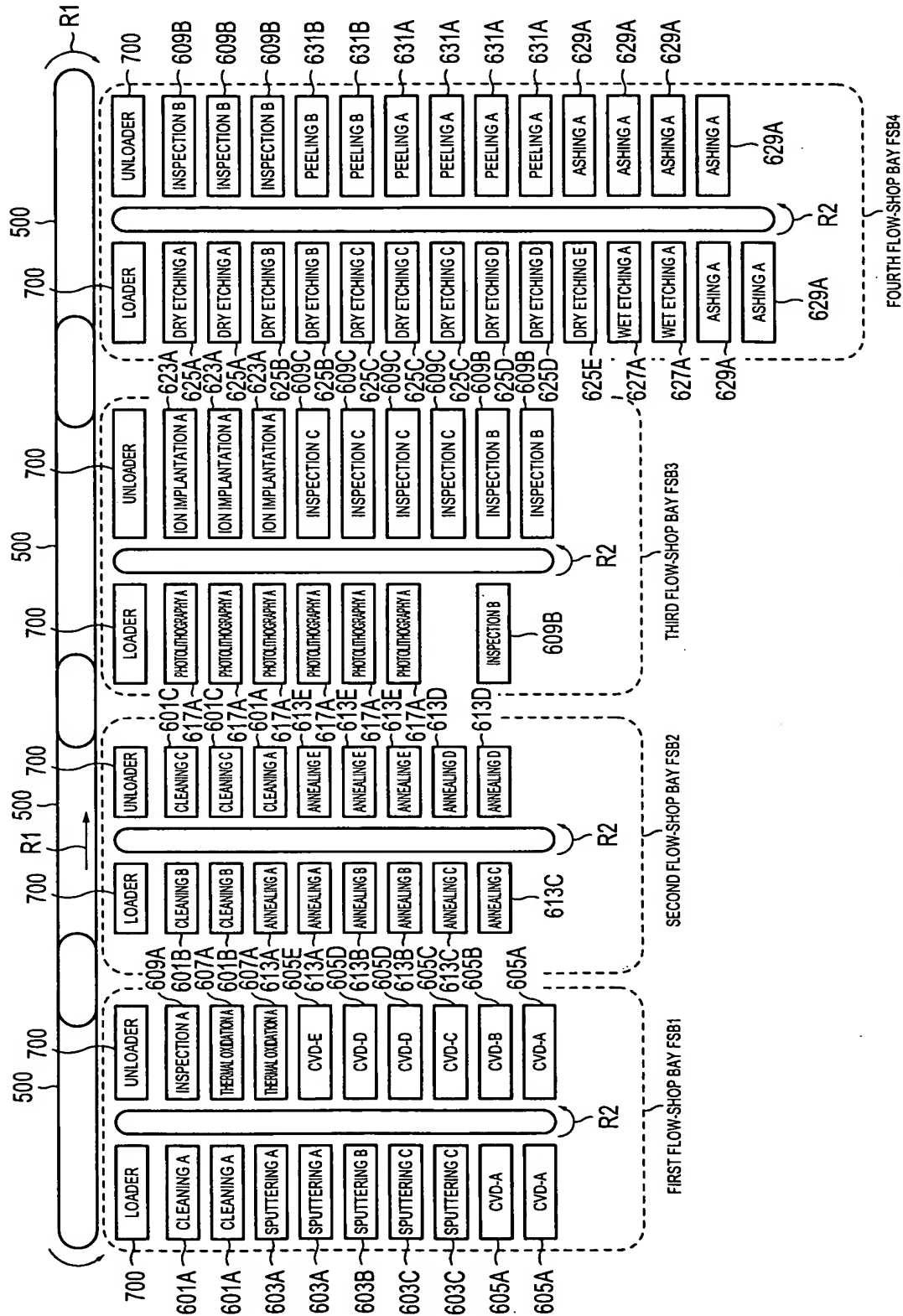


FIG. 20

FIRST FLOW-SHOP		SECOND FLOW-SHOP		THIRD FLOW-SHOP		FOURTH FLOW-SHOP	
APPARATUS	NUMBER OF APPARATUSES	APPARATUS	NUMBER OF APPARATUSES	APPARATUS	NUMBER OF APPARATUSES	APPARATUS	NUMBER OF APPARATUSES
CVD-A	3	ANNEALING A	2	PHOTOLITHOGRAPHY A	6	DRY ETCHING A	2
CVD-B	1	ANNEALING B	2	INSPECTION B	3	DRY ETCHING B	2
CVD-C	1	ANNEALING C	2	INSPECTION C	4	DRY ETCHING C	3
CVD-D	2	ANNEALING D	2	ION IMPLANTATION A	3	DRY ETCHING D	2
CVD-E	1	ANNEALING E	3	TOTAL	16	DRY ETCHING E	1
THERMAL OXIDATION A	2	CLEANING A	1			WET ETCHING A	2
INSPECTION A	1	CLEANING B	2			ASHING A	6
SPUTTERING A	2	CLEANING C	2			PEELING A	4
SPUTTERING B	1	TOTAL	16			PEELING B	2
SPUTTERING C	2					INSPECTION B	3
CLEANING A	2					TOTAL	27
TOTAL	18						

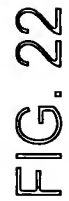
(A)

(B)

(C)

(D)

FIG. 21



22/23

APPARATUS	NUMBER OF APPARATUSES	
	2,500 SHEETS/MONTH	10,000 SHEETS/MONTH
CVD-A	2	3
CVD-B	1	1
CVD-C	2	2
CVD-D	3	3
CVD-E	2	2
ASHING A	17	17
ANNEALING A	2	2
ANNEALING B	1	2
ANNEALING C	1	2
ANNEALING D	3	3
ANNEALING E	1	3
ION IMPLANTATION A	5	5
WET ETCHING A	5	5
INSPECTION A	3	3
INSPECTION B	26	26
INSPECTION C	18	18
SPUTTERING A	2	2
SPUTTERING B	1	1
SPUTTERING C	1	2
CLEANING A	11	11
CLEANING B	6	6
CLEANING C	2	2
DRY ETCHING A	2	2
DRY ETCHING B	3	3
DRY ETCHING C	5	5
DRY ETCHING D	1	2
DRY ETCHING E	1	1
THERMAL OXIDATION A	1	2
PEELING A	14	14
PEELING B	3	3
PHOTOLITHOGRAPHY A	18	18
TOTAL	163	171

FIG. 23

APPARATUS	SMALL-SCALE AMOUNT OF PRODUCTION (ABOUT 2,500 SHEETS/MONTH)		MIDDLE-SCALE AMOUNT OF PRODUCTION (ABOUT 10,000 SHEETS/MONTH)	
	JOB-SHOP	COMPLETE FLOW-SHOP	JOB-SHOP	COMPLETE FLOW-SHOP
CVD-A	1	2	3	3
CVD-B	1	1	1	1
CVD-C	1	2	1	2
CVD-D	1	3	2	3
CVD-E	1	2	1	2
ASHING A	2	17	6	17
ANNEALING A	1	2	2	2
ANNEALING B	1	1	2	2
ANNEALING C	1	1	2	2
ANNEALING D	1	3	2	3
ANNEALING E	1	1	3	3
ION IMPLANTATION A	1	5	3	5
WET ETCHING A	1	5	2	5
INSPECTION A	1	3	1	3
INSPECTION B	2	26	5	26
INSPECTION C	1	18	4	18
SPUTTERING A	1	2	2	2
SPUTTERING B	1	1	1	1
SPUTTERING C	1	1	2	2
CLEANING A	1	11	3	11
CLEANING B	1	6	2	6
CLEANING C	1	2	2	2
DRY ETCHING A	1	2	2	2
DRY ETCHING B	1	3	2	3
DRY ETCHING C	1	5	3	5
DRY ETCHING D	1	1	2	2
DRY ETCHING E	1	1	1	1
THERMAL OXIDATION A	1	1	2	2
PEELING A	1	14	4	14
PEELING B	1	3	2	3
PHOTOLITHOGRAPHY A	2	18	6	18
TOTAL	34	163	76	171

FIG. 24